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LETTER

Renoprotective effects of renin–angiotensin–aldosterone system blockers in type 2 diabetes: demystifying multiple treatment comparisons in a network meta-analysis. Reply to Catalá-López F [letter]

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Abbreviations
ACEI ACE inhibitor
ARB Angiotensin II receptor blocker

To the Editor: We read with interest the letter from Dr Catalá-López [1] commenting on our paper [2]. We performed a network meta-analysis of the reno-protective effects of renin–angiotensin–aldosterone system blockers in type 2 diabetic patients [2]. We combined ACE inhibitors (ACEIs) and angiotensin II receptor blockers (ARBs), similar to the previous meta-analysis that compared the combined effects only to placebo [3]. Most importantly, there was very little evidence of any heterogeneity to suggest that ACEIs and ARBs are substantially different. Furthermore, current guidelines for kidney protection in diabetic patients [4] recommend the prescription of either ACEIs or ARBs.

We acknowledge that, because of its sample size, the study by Lewis et al [5] was the greatest contributor to the pooled RR for end-stage renal disease in direct meta-analysis (89.7%). We also acknowledge differences in the design of trials included in the analysis; however, this is quite common when performing a meta-analysis. We did not include the olmesartan trial [6], because this was published after the end of our search (July 2011).

Duality of interest The authors declare that there is no duality of interest associated with this manuscript.

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References

1. Catalá-López F (2012) Renoprotective effects of renin–angiotensin–aldosterone system blockers in type 2 diabetes: demystifying multiple treatment comparisons in a network meta-analysis. Diabetologia. doi:10.1007/s00125-012-2619-9
2. Vejakama P, Thakkinstian A, Lertrattananon D, Ingsathit A, Ngarmukos C, Attia J (2012) Reno-protective effects of renin-angiotensin system blockade in type 2 diabetic patients: a systematic review and network meta-analysis. Diabetologia 55:566–578
3. Casas JP, Chua W, Loukogeorgakis S et al (2005) Effect of inhibitors of the renin-angiotensin system and other antihypertensive

drugs on renal outcomes: systematic review and meta-analysis. Lancet 366:2026–2033
4. ADA (2012) Executive summary: standards of medical care in diabetes—2012. Diabetes Care 35(Suppl 1):S4–S10
5. Lewis EJ, Hunsicker LG, Clarke WR et al (2001) Renoprotective effect of the angiotensin-receptor antagonist irbesartan in patients with nephropathy due to type 2 diabetes. N Engl J Med 345:851–860
6. Imai E, Chan JC, Ito S et al (2011) Effects of olmesartan on renal and cardiovascular outcomes in type 2 diabetes with overt nephropathy: a multicentre, randomised, placebo-controlled study. Diabetologia 54:2978–2986